Remarks

This is in response to the Official Action dated July 28, 2008.

Claims 1 to 12, 14 to 35, 37 to 47 and 50 to 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Ayandeh (US Patent 6,069,895). The rejection is traversed as the rejection fails to establish how each of the claim limitations is taught by the reference. Without limiting the generality of the foregoing, the rejection fails to establish how the reference teaches at least the following emphasized portions of claim 1.

A server for use in a communications network having a <u>plurality of client NEs</u>, said server comprising:

    a)   an I/O for exchanging control messages with the client NEs;

    b)   a processing entity for implementing a routing function that provides <u>routing resources to the client NEs</u> **which are not equipped with a routing function**;

    c)   said processing entity operative to interact with a database including true topology information about the client NEs during implementation of said routing function.

In the rejection, the examiner states:

Regarding claim 1, 14 and 50, Ayandeh discloses a distributed route server wherein routing functions are distributed throughout the processing elements/switch node/line cards, and the controller and routing algorithm associated with the route server assist in the exchange of network control packets among processing element/network switch node/line cards and a route server in order to maintain a link-state topology database that reflect the current network connections (true topology), and (Abstract, Fig. 2 & 5, col. 6, line 35-67). In addition, routing algorithm along with topology database are used in configuring network topology (col. 1, line 26-67, col. 2, line 9-23).

We submit that this statement simply does not demonstrate anticipation of the claims. The examiner does not show where Ayandeh teaches having a server which includes a processing entity for implementing a routing function that provides <u>routing resources to the client NEs</u> **which are not equipped with a routing function.**

We can only presume the examiner is equating the plurality of client NE's with the plurality of processing elements/line cards. However, Ayendeh teachtes these line cards are cards within an NE, and are not NEs themselves.

In any event, Ayandeh discloses a system wherein the line cards are equipped with a routing function. For example, the abstract states (emphasis added):

"A design for a network route server in which network routing functions are distributed throughout the processing elements that constitute a switching node, while maintaining the global identity and routing information exchange functions of a route server element (RSE). **Intelligent line-cards are provided having the ability to route independently of the RSE. This removes the RSE as a bottleneck resource and ensures that the capacity of the switching node is limited only by the switching capacity of its switch fabric.** The RSE serves the functions of network topology discovery and routing table construction using a network topology database and an optimal routing algorithm. **Copies of the dynamically maintained routing tables are distributed to the intelligent line-cards on a periodic basis governed by predetermined criteria.** Wider geographical distribution of the RSE is enabled and most efficient utilization of the switch fabric is ensured. Scaling of distributed switching architectures is also enabled. The advantage is a significant increase in switching capacity as well as an increased degree of network connectivity."

Furthermore column 7 states:

"The intelligent line-cards 48 also are equipped with processors and memory to permit them to execute programs relating to sophisticated routing functions. The routing functions which are performed concurrently on the intelligent line-cards include: "

Accordingly the rejection fails to establish how Ayandeh teaches the claimed subject matter, as Ayandeh teaches a server which includes line cards which are equipped with a routing function (in order to ensure that the capacity of the switching node is limited only by the switching capacity of its switch fabric – see abstract) and therefore does not teach "a

processing entity for implementing a routing function that provides <u>routing resources to the</u> <u>client NEs</u> **which are not equipped with a routing function**" as claimed.

Accordingly, the rejection to claims 1, 14 and 50 is deficient and should be withdrawn. Similarly, the rejections to all of the remaining claims are deficient and should be withdrawn, at least for the reasons given.

Without limiting the generality of the foregoing, we point out that rejection to claim 2 is further deficient, for the rejection fails to establish that Ayandeh teaches a processing entity [which] implements said routing function by running a single instance of routing protocol.

The examiner cites column 9, lines 17- 40. However this section states (in part) "The size of the routing tables created by the central controller 46 and downloaded to the intelligent line-cards 48 can be on the order of 100 kbytes, or more. Updates to the routing table therefore require reliable acknowledged end-to-end transmission of several large packets. These packets may be multi-cast to all the intelligent line-cards 48 ". However this section merely describes multi-casting portions of the routing table to the line-cards (which in turn use each uses the copy of the routing table to implement its own routing functionality), and does not teach a processing entity which runs a single instance of a routing protocol that provides <u>routing resources to the client NEs</u> **which are not equipped with a routing function** as claimed.

Furthermore, we point out that rejection to claim 12 is further deficient, for the rejection fails to establish how the server in Ayandeh is excluded from the bearer plane. Indeed, Ayandeh does not mention a control plane or bearer plane. Furthermore, the only time the word "plane" appears (according to a key word search of the USPTO's database record for Ayndeh) is within a backplane bus (further implying the cards are part of a NE, and are not NE's in and of themselves.)

The rejection to claims 48 and 54 should be withdrawn at least for the reasons given above for claims 1 and 12. Furthermore, with respect to the obviousness rejection to claims 48 and 49 based and Ayandeh in view of Wing, we respectfully submit that the rejections fail to establish

a prima facie case of obviousness and should be withdrawn. For ease of reference, we set out claim 48 below:

A method for **providing a control plane** to a communications **network that does not have a control plane**, said method comprising:

    i a)   providing a server in the communications network that can e**xchange control messages with a plurality of NEs** of the communications network, the N**Es being part of a bearer plane of the communications network** <u>not previously controlled by a control plane</u>;

    j b)   implementing on the server a routing function providing routing resources to the plurality of NEs <u>without requiring the addition of a routing function to the NEs</u>. (emphasis added).

Niether reference teaches or even suggests providing a control plane to a communications network that does not have a control plane.

The examiner states:

"Ayandeh is silent on Nes being part of a bearer plane of communication network not previously controlled by a control plane."

The examiner then states:

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement NEs being part of a bearer plane of communication network not previously controlled by a control plane as taught by Wing with the teachings of …"

However, the examiner is mistaken as Wing teaches a system that is presumed to require a control plane and accordingly does not teach a system for providing a control plane to a communications network that does not have a control plane.

Furthermore, as argued above with respect to Ayendeh, we can only presume the examiner is equating the plurality of client NE's with the plurality of processing elements/line cards. However, Ayendeh teaches these line cards are cards within an NE, and are not NEs themselves.

In any event, Ayendeh specifically teaches that the line cards are intelligent and are required to implement their own routing function. Furthermore, Wing also requires the NEs implement their own routing function.

Accordingly, we respectfully submit the rejection fails to establish a prima facie case of obviousness, for failing to establish a proper motivation why a person skilled in the art would combine the references, and furthermore and in any event, fails to demonstrate how the claimed subject matter is fully taught even if the references can be combined (which is not admitted but denied, for the reasons already given).

We respectfully submit that the rejections fail to establish a *prima facie* case of obviousness and should be withdrawn.

We respectfully submit that all of the rejections are deficient, at least for the reasons set out above. Accordingly, we respectfully submit the application is ready for allowance, and a notice to that effect is hereby requested.

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

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